



City of Bartlett

A. KEITH McDONALD, Mayor
ENGINEERING & UTILITIES
W. R. McCLANAHAN - Director and City Engineer
WADE TOWLES - Assistant City Engineer

September 24, 2014

Ms. Joellyn Brazile
Tennessee Department of Environment and Conservation
Division of Water Pollution Control
8383 Wolf Lake Drive
Bartlett, TN 38133-4119

Re: City of Bartlett MS4 Annual Report, Year 2013-2014

Dear Ms. Brazile,

The attached information has been produced as a summary of the fourth year of this permitting cycle of the City of Bartlett Storm Water Program as required by section 5.4 of the Small MS4 General NPDES Permit effective October 1, 2010 (# TNS075698).

On July 31, 2014, a public notice was posted on the City of Bartlett's official web site soliciting comments on the annual report and announcing a public meeting for that purpose to be held on September 2, 2014. On July 31, 2014, the same public notice was also posted in the Bartlett Express. A public meeting was conducted September 2, 2014 at Bartlett City Hall as announced. Comments were accepted until 5 p.m. September 15, 2014. No public comments were received.

If you have any questions or comments please feel free to contact me at (901)385-6499 or dfent@cityofbartlett.org.

Sincerely,

Donald W. Fent
Storm Water Coordinator

Tab 1

MS4

Annual
Report



Tennessee Department of Environment and Conservation

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

1-888-891-8332 (TDEC)

Municipal Separate Storm Sewer System (MS4) Annual Report

1. MS4 INFORMATION

| | | |
|---------------------------------|--------------------------|------------|
| City of Bartlett | TNS075698 | |
| Name of MS4 | MS4 Permit Number | |
| Donald W. Fent | dfent@cityofbartlett.org | |
| Name of Contact Person | Email Address | |
| 901-385-6499 | | |
| Telephone (including area code) | | |
| 6382 Stage Road | | |
| Mailing Address | | |
| Bartlett | TN | 38134-3739 |
| City | State | ZIP code |

What is the current population of your MS4? 56,488

What is the reporting period for this annual report? From July 1, 2013 to June 30, 2014

2. WATER QUALITY PRIORITIES (SECTION 3.1)

- A. Does your MS4 discharge into waters listed as impaired on TN's most current 303(d) list and/or according to the on-line GIS mapping tool? ☒ Yes ☐ No
- B. If yes, please attach a list all impaired waters within your jurisdictional area.
- C. Does your MS4's jurisdictional area contain any waterbodies where a TMDL has been approved for parameters other than pathogens, siltation and habitat alterations? If yes, please attach a list. ☐ Yes ☒ No
- D. Does your MS4 discharge to any Exceptional TN Waters (ETWs) or Outstanding National Resource Waters (ONRWs)? If yes, please attach a list. ☐ Yes ☒ No
- E. Are you implementing additional specific provisions to ensure the continued integrity of ETWs or ONRWs located within your jurisdiction? ☐ Yes ☒ No

3. PROTECTION OF STATE OR FEDERALLY LISTED SPECIES (SECTION 3.2.1 General Permit for Phase II MS4s)

- A. Are there any state or federally listed species within the MS4's jurisdiction? ☒ Yes ☐ No
- B. Are any of the MS4 discharges or discharge-related activities likely to jeopardize any state or federally listed species? ☐ Yes ☒ No
- C. Please attach any authorizations or determinations by U.S. Fish & Wildlife Service on the effect of the MS4 discharges on state or federally listed species.

4. PUBLIC EDUCATION AND PUBLIC PARTICIPATION (SECTION 4.2.1 AND 4.2.2)

- A. Have you developed a Public Information and Education plan (PIE)? ☒ Yes ☐ No
- B. Is your public education program targeting specific pollutants and sources of those pollutants, such as Hot Spots? ☒ Yes ☐ No

Municipal Separate Storm Sewer System (MS4) Annual Report

- C. If yes, what are the specific causes, sources and/or pollutants addressed by your public education program? Sediments in yards and construction; nutrients from fertilizers and yard waste; bacteria and pathogens from pet waste and illicit connections; herbicides and pesticides; and automobile fluids and other household hazardous waste.
- D. Note specific successful outcome(s) (NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period. None
- E. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? ☐ Yes ☒ No
- F. How do you facilitate, advertise, and publicize public involvement and participation opportunities? Public notices in newspaper or website; local cable channel; emails.
- G. Do you have a webpage dedicated to your stormwater program? ☒ Yes ☐ No
If so, what is the link/URL: <http://www.cityofbartlett.org/915/Storm-Water-Management-Division>
- H. Are you tracking and maintaining records of public education, outreach, involvement and participation activities? Please attach a summary of these activities. ☒ Yes ☐ No

5. ILLICIT DISCHARGE DETECTION AND ELIMINATION (SECTION 4.2.3)

- A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? ☒ Yes ☐ No
- B. Have you completed a map of all storm drain pipes of storm sewer system? ☒ Yes ☐ No
- C. How many outfalls have you identified in your system? 2132
- D. Have any of these outfalls been screened for dry weather discharges? ☒ Yes ☐ No
- F. What is your frequency for screening outfalls for illicit discharges? Major outfalls to waters of the state are screened once every five years unless evidence of an illicit discharge requires more frequent screening. Other outfalls are screened one time unless evidence of an illicit discharge requires more frequent screening.
- G. Do you have an ordinance that effectively prohibits illicit discharges? ☒ Yes ☐ No
- H. During this reporting period, how many illicit discharges/illegal connections have you discovered (or been reported to you)? 26
- I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? 26

6. CONSTRUCTION SITE STORMWATER RUNOFF (SECTION 4.2.4)

- A. Do you have an ordinance or adopted policies stipulating:
- Erosion and sediment control requirements? ☒ Yes ☐ No
- Other construction waste control requirements? ☒ Yes ☐ No
- Requirement to submit construction plans for review? ☒ Yes ☐ No
- MS4 enforcement authority? ☒ Yes ☐ No
- B. How many active construction sites disturbing at least one acre were there in your jurisdiction this reporting period? 240
- C. How many of these active sites did you inspect this reporting period? 240

Municipal Separate Storm Sewer System (MS4) Annual Report

- D. On average, how many times each, or with what frequency, were these sites inspected Monthly
(e.g., weekly, monthly, etc.)?
- E. Do you prioritize certain construction sites for more frequent inspections? ☒ Yes ☐ No
If Yes, based on what criteria? Recurring non-compliance encountered during monthly routine compliance inspections.

7. PERMANENT STORMWATER CONTROLS (SECTION 4.2.5)

- A. Do you have an ordinance or other mechanism to require:
- Site plan reviews of all new and re-development projects? ☒ Yes ☐ No
- Maintenance of stormwater management controls? ☒ Yes ☐ No
- Retrofitting of existing BMPs with green infrastructure BMPs? ☐ Yes ☒ No
- B. What is the threshold for new/redevelopment stormwater plan review? (e.g., all projects, projects disturbing greater than one acre, etc.) All projects
- C. Have you implemented and enforced performance standards for permanent stormwater controls? ☒ Yes ☐ No
- D. Do these performance standards go beyond the requirements found in Section 4.2.5.2 and require that pre-development hydrology be met for:
- Flow volumes ☒ Yes ☐ No
- Peak discharge rates ☒ Yes ☐ No
- Discharge frequency ☐ Yes ☒ No
- Flow duration ☐ Yes ☒ No
- E. Please provide the URL/reference where all permanent stormwater management standards can be found.
N/A
- F. How many development and redevelopment project plans were reviewed for this reporting period? 28
- G. How many development and redevelopment project plans were approved? 28
- H. How many permanent stormwater management practices/facilities were inspected? 0
- I. How many were found to have inadequate maintenance? N/A
- J. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please specify) N/A
- K. How many enforcement actions were taken that address inadequate maintenance? N/A
- L. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? ☒ Yes ☐ No
- M. Do all municipal departments and/or staff (as relevant) have access to this tracking system? ☐ Yes ☒ No
- N. Has the MS4 developed a program to allow for incentive standards for redeveloped sites? ☐ Yes ☒ No
- O. How many maintenance agreements has the MS4 approved during the reporting period? 0

8. CODES AND ORDINANCES REVIEW AND UPDATE (SECTION 4.2.5.3)

Municipal Separate Storm Sewer System (MS4) Annual Report

- A. Is a completed copy of the EPA Water Quality Scorecard submitted with this report? ☐ Yes ☒ No
- B. Include status of implementation of code, ordinance and/or policy revisions associated with permanent stormwater management. Current code, ordinance and policies support permanent storm water management. They have been reviewed and will require changes to support the new run-off reduction standard of the permit. Stakeholder meeting has been conducted. Follow-up meeting scheduled for fall of 2014 with ordinance changes scheduled for completion April 2015.

9. STORMWATER MANAGEMENT FOR MUNICIPAL OPERATIONS (SECTION 4.2.6)

- A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:
- | | | |
|---|---|--|
| All parks, ball fields and other recreational facilities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal turf grass/landscape management activities | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| All municipal vehicle fueling, operation and maintenance activities | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| All municipal maintenance yards | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal waste handling and disposal areas | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
- B. Are stormwater inspections conducted at these facilities? ☒ Yes ☐ No
1. If Yes, at what frequency are inspections conducted? Every five years unless there is a change.
- C. Have standard operating procedures or BMPs been developed for all MS4 field activities? (e.g., road repairs, catch basin cleaning, landscape management, etc.) ☐ Yes ☒ No
- D. Do you have a prioritization system for storm sewer system and permanent BMP inspections? ☐ Yes ☒ No
- E. On average, how frequently are catch basins and other inline treatment systems inspected? N/A
- F. On average, how frequently are catch basins and other inline treatment systems cleaned out/maintained? N/A
- G. Do municipal employees in all relevant positions and departments receive comprehensive training on stormwater management? ☒ Yes ☐ No
- H. If yes, do you also provide regular updates and refreshers? ☒ Yes ☐ No
- If so, how frequently and/or under what circumstances? Refresher training every five years.

10. STORMWATER MANAGEMENT PROGRAM UPDATE (SECTION 4.4)

- A. Describe any changes to the MS4 program during the reporting period including but not limited to:
- Changes adding (but not subtracting or replacing) components, controls or other requirements (Section 4.4.2.a). None
- Changes to replace an ineffective or unfeasible BMP (Section 4.4.2.b). None
- Information (e.g. additional acreage, outfalls, BMPs) on program area expansion based on annexation or newly urbanized areas. None
- Changes to the program as required by the division (Section 4.4.3). None

11. EVALUATING/MEASURING PROGRESS

Municipal Separate Storm Sewer System (MS4) Annual Report

- A. What indicators do you use to evaluate the overall effectiveness of your Stormwater Management Program, how long have you been tracking them, and at what frequency? Note that these are not measurable goals for individual BMPs or tasks, but large-scale or long-term metrics for the overall program, such as in-stream macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

| Indicator | Began Tracking (year) | Frequency | Number of Locations |
|-------------------------|-----------------------|------------------------|---------------------|
| <i>Example: E. coli</i> | 2003 | Weekly April–September | 20 |
| None | | | |

- B. Provide a summary of data (e.g., water quality information, performance data, modeling) collected in order to evaluate the performance of permanent stormwater controls installed throughout the system. This evaluation may include a comparison of current and past permanent stormwater control practices. None

12. ENFORCEMENT (SECTION 4.5)

- A. Identify which of the following types of enforcement actions you used during the reporting period, indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater control) or note those for which you do not have authority:

| Action | Construction | Permanent Stormwater Controls | Illicit Discharge | Authority? | |
|-----------------------|--------------|-------------------------------|-------------------|---|-----------------------------|
| Notice of violation | #128 | #0 | #1 | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Administrative fines | #_____ | #_____ | #_____ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Stop Work Orders | #1 | #_____ | #_____ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Civil penalties | #_____ | #_____ | #_____ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Criminal actions | #_____ | #_____ | #_____ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Administrative orders | #_____ | #_____ | #_____ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Other _____ | #_____ | #_____ | #_____ | | |

- B. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions in your jurisdiction? ☒ Yes ☐ No

- C. What are the 3 most common types of violations documented during this reporting period? Failure to maintain BMPs, yard waste placed in streets/gutters, draining pools to storm drains.

13. PROGRAM RESOURCES (OPTIONAL)

- A. What was your annual expenditure to implement the requirements of your MS4 NPDES permit and SWMP this past reporting period? _____
- B. What is next year's budget for implementing the requirements of your MS4 NPDES permit and SWMP?

- C. Do you have an independent financing mechanism for your stormwater program? ☐ Yes ☐ No
- D. If so, what is it/are they (e.g., stormwater fees), and what is the annual revenue derived from this mechanism?

Source:

Amount \$

Municipal Separate Storm Sewer System (MS4) Annual Report

Source:

Amount \$

- E. How many full time employees does your municipality devote to the stormwater program (specifically for implementing the stormwater program vs. municipal employees with other primary responsibilities that dovetail with stormwater issues)? _____
- F. Do you share program implementation responsibilities with any other entities? ☐ Yes ☐ No

Entity

Activity/Task/Responsibility

Your Oversight/Accountability Mechanism

G. Please attach a copy of your Organizational Chart

14. CERTIFICATION

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in sub-part 6.7.2 of the permit.

"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

A. Keith McDonald

Printed Name and Title

Signature

A. Keith McDonald

Date

9/22/14

Annual reports must be submitted in accordance with the requirements of Section 5.4. (Reporting) of the permit. Annual reports must be submitted to the appropriate Environmental Field Office (EFO) by September 30 of each calendar year, as shown in the table below:

| EFO | Street Address | City | Zip Code | Telephone |
|--------------|-----------------------------|--------------|----------|----------------|
| Chattanooga | 540 McCallie Avenue STE 550 | Chattanooga | 37402 | (423) 634-5745 |
| Columbia | 1421 Hampshire Pike | Columbia | 38401 | (931) 380-3371 |
| Cookeville | 1221 South Willow Ave. | Cookeville | 38506 | (931) 432-4015 |
| Jackson | 1625 Hollywood Drive | Jackson | 38305 | (731) 512-1300 |
| Johnson City | 2305 Silverdale Road | Johnson City | 37601 | (423) 854-5400 |
| Knoxville | 3711 Middlebrook Pike | Knoxville | 37921 | (865) 594-6035 |
| Memphis | 8383 Wolf Lake Drive | Bartlett | 38133 | (901) 371-3000 |
| Nashville | 711 R S Gass Boulevard | Nashville | 37216 | (615) 687-7000 |

Tab 2
List
of
Impaired
Waters

City of Bartlett
Municipal Separate Storm Sewer System (MS4) Annual Report

2. Water Quality Priorities (Section 3.1)

B. List of Impaired Waters:

| | |
|--|---------------------|
| 1. Loosahatchie River | TN08010209 002-1000 |
| 2. Loosahatchie River | TN08010209 002-2000 |
| 3. Oliver Creek | TN08010209 002-0400 |
| 4. Buckhead Creek | TN08010209 002-0500 |
| 5. Howard Creek | TN08010209 002-0700 |
| 6. Harrington Creek | TN08010210 001-0100 |
| 7. Unnamed tributary to Fletcher Creek | TN08010210 023-0100 |

Tab 3

Listed Species Evaluation

City of Bartlett
Municipal Separate Storm Sewer System (MS4) Annual Report

3. Protection of State or Federally Listed Species (Section 3.2.1)
C. Determinations (Section 3.2)

The City of Bartlett has evaluated the effects of its storm water discharges, allowable non-storm water discharges and discharge related activities on state and federally listed species and critical habitat by referencing the listed species list published by the Tennessee Natural Heritage Program on the State of Tennessee web site as well as with consultations conducted with Ms. Mary Jennings with the United States Fish and Wildlife Service completed on June 11, 2014 and with Mr. Robert Todd with Tennessee Wildlife Resources Agency completed on July 16, 2014.

Consultations with Ms. Jennings resulted in the belief that adverse effects to federally listed species from activities carried out under the City of Bartlett's MS4 program are not anticipated (consultation attached).

Consultations with Mr. Todd resulting in the Tennessee Wildlife Resources Agency opinion that the City of Bartlett's current code, city ordinances and policies, and other efforts to protect water quality are sufficient to minimize potential impacts to listed species under their authority in order to not jeopardize the continued existence of these species; and that the MS4 discharges or discharge-related activities within the City of Bartlett are not likely to jeopardize any state or federally listed species (consultation attached).

Based upon our review and these consultations, we do not have reason to believe City of Bartlett discharges and/or discharge-related activities will jeopardize the continued existence of any state or federally listed species or result in adverse modification or destruction of critical habitat.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

446 Neal Street
Cookeville, TN 38501

June 11, 2014

Don Fent
Stormwater Coordinator
City of Bartlett
6382 Stage Road
Bartlett Tennessee 38134-3739

Re: FWS #14-EC-0066

Dear Mr. Fent:

Thank you for your e-mail received May 14, 2014, regarding compliance with the Tennessee Department of Environment and Conservation (TDEC) Notice of Coverage annual reporting requirements for the City of Bartlett's MS4 permit (TNS075698) stormwater management program in Shelby County, Tennessee. U.S. Fish and Wildlife Service (Service) personnel have reviewed your request for technical assistance and offer the following comments.

Review of our endangered species database indicates that no federally listed or proposed endangered or threatened species occur within the jurisdictional boundaries of the City of Bartlett's stormwater management program. In view of this, we believe that adverse effects to federally listed species from activities carried out under that program are not anticipated. You should be aware that, while there are presently no known records in your jurisdiction, the recently proposed federally endangered Northern long-eared bat (*Myotis septentrionalis*) and endangered Indiana bat (*Myotis sodalis*) may be found in trees with appropriate summer roost habitat along waterways. We appreciate the efforts of Bartlett's stormwater management program in helping to ensure that the quantity and quality of stormwater discharges from development activities in upland areas protect the water quality of the receiving streams within your jurisdictional boundaries and in downstream areas.



TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER
P. O. BOX 40747
NASHVILLE, TENNESSEE 37204

July 16, 2014

Donald W. Fent
Storm Water Coordinator
City of Bartlett
6382 Stage Road
Bartlett, TN 38134-3739

Re: City of Bartlett MS4 Determination Review

Dear Mr. Fent:

The Tennessee Wildlife Resources Agency has reviewed the information that you provided regarding your MS4 permit. Data available to us does not indicate that aquatic state listed species under our authority have been documented in streams within your jurisdictional area although there are two terrestrial state listed species within your city's jurisdiction. It is our opinion that current code, city ordinances and policies, and other efforts to protect water quality are sufficient to minimize potential impacts to listed species under our authority in order to not jeopardize the continued existence of these species; and we agree with your determination that the MS4 discharges or discharge-related activities within the City of Bartlett are not likely to jeopardize any state or federally listed species.

If you have questions regarding this matter or if I may be of further assistance, please contact me at 615-781-6572.

Sincerely,

Robert M. Todd
Fish and Wildlife Environmentalist

cc: Allen Pyburn, Region I Habitat Biologist

The State of Tennessee

IS AN EQUAL OPPORTUNITY, EQUAL ACCESS, AFFIRMATIVE ACTION EMPLOYER

Tab 4
Public
Education/
Outreach
Summary

City of Bartlett
Municipal Separate Storm Sewer System (MS4) Annual Report

4. Public Education and Public Participation (Section 4.2.1 and 4.2.2)

H. Summary of Activities:

a. Public Education and Outreach Summary:

- a. Participated in the Tennessee Stormwater Association's Tennessee Association of Broadcasters public information broadcasting program (TAB).
- b. 729 Homeowners Guide to Cleaner Water pamphlets distributed.
- c. 728 Pet Waste and Water Quality Pamphlets distributed.
- d. 436 Clean Water – Ever Body's Business bookmarks distributed.
- e. Seven FYI local cable broadcast covering six months were made:
 - i. *Loose Leaf Pick-up* broadcasts in October and November 2013 and January 2014.
 - ii. *Winter Yard Debris Disposal* broadcast in January 2014.
 - iii. *Spring Yard Debris Disposal* broadcast in April 2014.
 - iv. *Stormwater Preservation* broadcasts in February 2013.
 - v. *Household Hazardous Waste - Chlorine* broadcast in May 2014.
- f. 39 Pollution Found in Your Neighborhood door tags distributed.
- g. 28 Guide to Watershed pamphlets distributed.
- h. Four drain inlets were placard.
- i. Storm Water Booth at Bartlett Fall Festival in September 2013.
 - i. Five question quiz on storm water with prizes used to reinforce learned activities.
 - ii. 118 people took quiz.

b. Public Involvement/Participation Summary:

- a. One public notice was made via the internet and local paper.
 - i. Public meeting for 2013 Annual Report.
- b. A working group consisting of representatives of local builders, engineers and developers met to discuss changes to the city's storm water ordinance and subdivision ordinance required to implement the runoff reduction standard in the MS4 permit.